Alumni Banquet Features Multimedia Presentation, Roast of Dean Gillott

The Fifth Annual Engineering and Computer Science Alumni Banquet set new records for attendance and enjoyment as more than 420 alumni, students, faculty, and friends of the School gathered at the Red Lion Motor Inn in Sacramento on Friday, April 18, 1986. Engineering and Computer Science Alumni Chapter President Dan Hinrichs directed the festivities, which included brief addresses by Dean Gillott and CSUS President Gerth, and introductions of the new Alumni Chapter officers.

Honored as the Outstanding Alumni for 1986 were Travis Smith (A.S. '53) and his sons Ron Smith (C.E. '62) and Ted Smith (C.E. '62). The citations that accompanied their awards are printed elsewhere in this issue of E & CS NEWS. New this year was the Outstanding Faculty Award, presented by the Alumni to Professor Kenneth Kerri, Civil Engineering. Once again, Hewlett-Packard presented calculators to outstanding undergraduate students: Linda Bishop, Civil Engineering; James Ranlett, Electrical & Electronic Engineering; Brian Robbers, Mechanical Engineering; and Maribel Young, Computer Science.

A new multimedia presentation describing the School of Engineering and Computer Science at CSUS was given its premiere at the banquet. This audiovisual program, which employs nine computer-controlled slide projectors, narration, and special sound and visual effects, was produced by the CSUS University Media Services under a generous grant from Pacific Bell. In this program, the audience looks at the School through the eyes of a young woman who is seeking a career that will make use of her talents in science, math, and the arts, as well as her interests in people and society. Photographs of CSUS students and faculty in action portray the commitment of the School to educating people who will respond creatively and compassionately to the needs of the world.

Climaxing the evening was a roast of Don Gillott, in celebration of his ten years as Dean of the School of Engineering and Computer Science. Dave Hubka, from Hewlett-Packard, Norm Phillips, of Pacific Bell, Lowell Beckendorf, of Pacific Gas & Electric, Tim Comstock, CSUS Dean of Students, and School representatives Les Gabriel, Dick Nickles, Larry Hill, and Cici Mattiuzzi amused everyone with their tongue-in-cheek reviews of the highlights of Don's career.

Professor Ken Kerri was voted the Outstanding E&CS Faculty Member for 1986.

Norm Phillips of Pacific Bell was given a special award for his many contributions to the School.

Assistant Dean Larry Hill and Career Counselor Cici Mattiuzzi reviewed events in the career of Dean Gillott.

Dean Gillott and his family were among the more than 400 alumni, faculty, students, and friends who enjoyed the festivities at the Fifth Annual E & CS Awards Banquet.
Message from the Dean:
CSUS and Community Service

One of the hallmarks of California State University, Sacramento is its commitment to community service. The School of Engineering and Computer Science has integrated many of its community service activities into the School’s academic programs. A major outreach program and one from which we all derive tremendous benefits, is the Assistive Device Center. This Center has been a part of the School of Engineering and Computer Science since 1978. During that time the Center has served more than 300 clients with disabilities who need help with communication, educational or job access, mobility, or environmental control. The clients are of all ages and come from Northern California and Nevada. A majority of these clients are cerebral palsied. Some, however, have disabling conditions such as head trauma, stroke, and neurological diseases.

The Assistive Device Center provides information nationally and internationally regarding the use of technology for individuals with disabilities. Over 1000 people visit the Center each year and attend presentations given by the staff. Each year the Center corresponds with numerous individuals and agencies around the world to exchange information about the uses of technology for individuals with disabilities. The Resource Center, which is part of the Assistive Device Center, responds to an average of 20 requests for information per month.

A very valuable component of the Assistive Device Center is its integration into the University’s academic programs. School of Engineering and Computer Science students in one of the engineering, engineering technology, or computer science programs often develop their senior projects around client needs within the Assistive Device Center. The Center staff offers teaching and observation opportunities for CSUS students in a variety of engineering and health-related disciplines. Workshops are also offered in association with the CSUS office of Extended Learning Programs.

The Assistive Device Center is just one example where CSUS students have an opportunity to combine education and community service in a partnership which provides practical applications to the School’s educational programs.

Faculty Activities

François Cheong-Siat-Moy, Civil Engineering, has had his paper, “The K-Factor Paradox”, accepted for publication in the Journal of Structural Engineering of the American Society of Civil Engineers (ASCE). He will also present the paper, which deals with the state-of-the-art of the design of columns in steel buildings, at the ASCE Structural Congress in New Orleans, in September, 1986.

Kenneth Kerri, Civil Engineering, was elected an Honorary Member of the Water Pollution Control Federation at the Annual Conference in Kansas City. During the conference he gave talks on “Home Study Training Programs for Operators” and “Operator Training Certification Programs in Europe”.

Richard H. Thayer, Computer Science, presented a paper, “Software Engineering Project Laboratory: The Bridge Between University and Industry”, at a workshop sponsored by the Software Engineering Institute (SEI), Carnegie-Mellon University. The purpose of the workshop was to develop a Master of Software Engineering degree curriculum. Thayer’s paper was co-authored by Leo A. Endres, Atkinson System Technologies, Sacramento.


Trevor Davey, Mechanical Engineering, presented a paper, “A Canine Model for Neurocardiography Evaluation,” at the 21st Annual Meeting of the Association for the Advancement of Medical Instrumentation, held in Chicago in April, 1986 His co-authors were R. Achtel, M.D., and R. Marshall, D.V.M., of Sutter Hospitals, Sacramento.

Albert M. Cook, Electrical & Electronic Engineering, has been awarded a grant from the Department of Rehabilitation to address two major needs relating to the provision of equipment, aid, and assistive devices to individuals with disabilities: (1) the need for a loan guarantee program to purchase needed assistive devices, and (2) the need for custom or individually-tailored support systems.

Lester Gabriel, Civil Engineering, has received a grant from the Contractors State License Board to provide a series of in-service training sessions in the use of microcomputers.

CSUS Scholarly Activity Grants for the 1986-87 Academic Year were awarded to Albert M. Cook, Electrical & Electronic Engineering, for the evaluation of robotic arm systems for use in early special education, to George J. Kostyrko, Civil Engineering, for computerization of data acquisition in real time holographic interferometry, and to Ngo D. Thinh, Mechanical Engineering, for a study of recirculation eddies and vortex shedding in an internal combustion engine.

Four E & CS Students Win Senior Achievement Awards

Four students from the School of Engineering and Computer Science were among the nineteen CSUS seniors who were selected to receive the 1986 Senior Achievement Awards. To be nominated for this award, a student must be a graduating senior with an overall grade point average of 3.40, have completed four full semesters at CSUS, have participated in at least two campus organizations or academic activities for which no pay or academic credit was received, have demonstrated evidence of leadership qualities, and have contributed positively to campus life. The E & CS students were: Guillermo Rodrigues Ayan, Mechanical Engineering, Barbara Ann Barnes, Civil Engineering, William John Hennig, Jr., Electrical & Electronic Engineering, and Emery L. Kelly, Civil Engineering.

E & CS NEWS is published three times during the academic year to inform our alumni and friends about student, faculty, and alumni activities, curricular developments, research results, and other items of interest. We invite your comments and suggestions. Please address all communications to the Editor,

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Outstanding Alumni Awards

Three alumni from one family were honored by the Engineering and Computer Science Alumni Chapter as the Outstanding Alumni for 1986. The citations that accompanied the plaques that they were given at the Alumni Awards Banquet are the following:

**Travis Smith, Applied Science, ’53:** You were one of the early graduates of Sacramento State, earning your degree five years before the Engineering program was established at this institution. Born in Texas, you served your adopted state of California with distinction for more than 28 years. Beginning in the Soil Studies Unit of the California Department of Transportation, you served as Chief of the Soils and Exploration Unit, Chief of the Foundation Section of the Materials and Research Department, and ultimately as State Highway Maintenance Engineer. A recognized authority on highway foundations, cut-slope design, groundwater control and landslides, you have served as a consultant to the United Nations, the government of Mexico, and the Mexican Road Builders Association. You have served on the Transportation Research Board and have been active in the American Society of Civil Engineers. Over the years you have shared your knowledge and experience through technical publications and by teaching at universities in Sacramento and Berkeley. Your sharing has extended beyond the engineering profession, for you have given many hours of volunteer work to your church and to community organizations. By your guidance and counsel, you have inspired your two sons to be engineers and your daughter to be a teacher of mathematics. You are truly one of the Outstanding Alumni of California State University, Sacramento.

**Ronald W. Smith, C E ’62:** Following your father’s example, you chose a career in Civil Engineering, beginning with the California Department of Water Resources and moving after a time to the Washington Department of Fisheries. In 1972, you joined The Spink Corporation and have advanced to the position of Vice President, with administrative charge of Computer Applications, Mechanical, Electrical and Structural Engineering Departments. A registered Professional Engineer in California, Oregon, and Washington, you are active in several professional organizations, including the American Society of Civil Engineers, the Association of Conservation Engineers, the Water Pollution Control Federation, and the American Water Resources Association. In addition, you serve as President of the Sacramento Host Lions Club and are active in your church and such community organizations as the Sacramento Tree Foundation, the Boy Scouts of America, and the Sacramento Metropolitan Chamber of Commerce. You have brought honor to your Alma Mater by your distinguished engineering career, and you serve her as a member of the Alumni Association, the Hornet Stinger Foundation, and the Advisory Boards of the School of Engineering and Computer Science and the Capital Center of the Mathematics, Engineering, Science Achievement (MESA) Program. Your University is proud to recognize you as an Outstanding Alumnus.

**Ted A. Smith, C E ’62:** Like your father, you have brought honor to California State University, Sacramento by your professional career and your service to the Sacramento community. A registered Professional Engineer in California, Texas, and Utah, you have served both the public and private sectors for nearly three decades. In your years with the California Department of Water Resources, you specialized in the design and construction of hydraulic structures. More recently, you served on the staff of The Spink Corporation as project manager for a number of municipal and private development projects. Last October, you were named Vice President and Director of Civil Engineering at C.G. MacNS, Inc. You have also been active in several professional organizations, such as the California Society of Professional Engineers, the American Society of Civil Engineers, and the American Concrete Institute. Your record of community service is equally impressive. You have been a Sacramento United Way Coordinator, a member of the Dixieland Jazz Jubilee Volunteer Staff, Director of the Children’s Home Society of California, Inc. and have been active in several civic organizations, including the Rotary Club of North Sacramento, and the Metropolitan Sacramento Chamber of Commerce. It is fitting that you be honored as an Outstanding Alumnus of the School of Engineering and Computer Science.

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Outstanding Alumni Ted, Ron, and Travis Smith, with Dean Gillott and Alumni Chapter President Dan Hinrichs.

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CSUS Team Wins ASME Human Powered Vehicle Design Competition

The design team from the CSUS student chapter of the American Society of Mechanical Engineers came up with the winning entry in the 1986 Regional Human Powered Vehicle Competition. Thirty-one student groups were entered; they included teams from eight CSU and five UC campuses as well as from Arizona, Nevada, Oregon, Washington, South Dakota, and New York. In the racing part of the competition, the CSUS team did not do quite as well, placing fifth in the sprint competition, with a speed of 43.31 mph, sixth in the men’s 20-mile road race, and sixth in the women’s 10-mile road race.
Aerojet TechSystems Company: Pioneering the Future with Reliability Second to None

Formerly named Aerojet Liquid Rocket Company, Aerojet Techsystems has designed, produced, and tested liquid propulsion systems for defense and space programs since 1942. The Aerojet family of launch vehicle propulsion systems includes the Titan I, a first generation ballistic missile, Titan II, a major segment of America’s land-based defensive system for 20 years, and Titan III, the “mission-assured” rocket that launched Viking and Voyager space probes and hundreds of space and military satellites.

TechSystems’ propulsion systems also have displayed their unsurpassed reliability in support of NASA’s manned space missions. The Aerojet Service Propulsion System powered the Apollo lunar module, providing the vital thrust which brought the astronauts home. The reusable Orbital Maneuvering Subsystem engines provide power to insert America’s space shuttles in the proper orbit, to maneuver the orbiter during its flight, and to initiate the shuttle’s descent to earth. The OMS engines have performed flawlessly on all flights to date.

One application of Aerojet TechSystems’ experience with high-speed, high efficiency pumps for liquid rocket engines has been the development of advanced waterjets that power the U.S. Navy’s fastest fleet of ships, the Patrol Hydrofoil Missle ships.

Using pump technology adapted from rocket engines, TechSystems has developed AERO-SAFE, a revolutionary fire-elimination system. AERO-SAFE systems are being produced for use on harbor patrol craft for the Port of Rotterdam, one of the world’s busiest supertanker ports.

Aerojet’s Air Turborocket (ATR) is a unique propulsion system for the 1990’s, answering emerging DoD requirements for mission flexibility in altitude, speed, and extended-range capability. The ATR is a high-performance air-breathing engine that operates like a turbojet at supersonic speeds and like a ramjet at supersonic and hypersonic speeds.

Located in Sacramento, California, Aerojet TechSystems is one of five operating companies of Aerojet General, a GenCorp company. TechSystems takes pride in its tradition of excellence and is building on its proven technology to deliver high performance systems for the missions of the future.

Alumni Notes

Virgilio Estevez, Computer Science ’84, reports that he is a Second Lieutenant in the Air Force, serving with the Strategic Air Command Headquarters as a “Command and Control Missile Warning Software Engineer”. He finds the work interesting and challenging, in spite of the fact that he’s working with the DOD language “Jovial” and maintaining many programs written by non-programmers. He writes, “I have many fond memories of CSUS and greatly appreciate the rigorous education I received in Computer Science.”

Thomas P. Nesbitt, Mechanical Engineering ’84, is employed as an engineer at Varian Associates, Microwave Tube Division, Palo Alto, involved in high power klystron engineering.

John Wilt, Mechanical Engineering ’67, was promoted to Chief, Engineering and Program Support Division, Air Force Plant Representative Office at Aerojet-General Corporation, Sacramento. His division is responsible for all technical liaison and contract administration activities on Department of Defense contracts with the three Aerojet companies. John also serves as a technical consultant on special DOD and NASA engineering teams.

Mark Koenig, Electrical & Electronic Engineering ’83, is working for Lockheed Missiles & Space Company in Sunnyvale. He says that he has found a great need for more students graduating with backgrounds in RF design and analog circuit design and urges CSUS to promote these areas of study.

Douglas Wong-Sing, Computer Science ’83, now living in San Francisco, congratulates the School on the acquisition of the VAX computers. He says, “It will certainly be an asset for graduating Computer Science students to have DEC VAX experience.

Ardo Kasbrian, Mechanical Engineering ’70, monitors industrial waste discharge operations, involving some 8000 industrial organizations, for the Department of Public Works of the City of Los Angeles. “Never did I imagine when I graduated,” he states, “that I’d end up in this specialty.”